INTERNATIONAL SEARCH REPORT

International application No.
PCT/US05/09797

A. CLASSIFICATION OF SUBJECT MATTER
IPC: A61K 35/00(2006.01);A61K 38/00(2006.01);C07K 14/00(2006.01)

USPC: 514/1,2;530/300
According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
U.S. : 514/1, 2; 530/300

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X --- Y	US 6,423,703 (TRACEY et al) 17 January 2002 (17.01/2002), Abstract, col 3, col 8.	1-2, 5-8 --- 3-4
y	KIM Y.K. et al. Expression of PAS within hypothalamic neurons: a model for decreased food intake after C75 treatment. 2002.J. Endocrinol Metab. 283. E867-E879. see abstract and introduction.	3
y	LEON J. et al. Modulation of rat striatal glutamatergic response in search for new neuroprotective agents: evaluation of melatonin and some kynurenine derivatives. 2003. Brain Research Bulletin. 43, 525-530. See abstract and intro.	4

☒ Further documents are listed in the continuation of Box C. ☐ See patent family annex.

* Special categories of cited documents:
"A" document defining the general state of the art which is not considered to be of particular relevance
"E" earlier application or patent published on or after the international filing date
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"P" document published prior to the international filing date but later than the priority date claimed
"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
31 May 2007 (31.05.2007)	20 JUN 2007
Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (571) 273-3201	Authorized officer Steven H. Standley Telephone No. (571) 272-0700

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International application No.
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C. (Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
x	SHENG R. EDT, A tetrahydroacridine dervative inhibits cerebral ischemia and protects rat cortical neurons against glutamate-induced cytotoxicity. 2002. Acta Pharmacologica Sinica. 24, 390-393. see title.	9

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(81) Designated States *(unless otherwise indicated, for every kind of national protection available)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: NOVEL METHOD OF NEUROPROTECTION BY PHARMACOLOGICAL INHIBITION OF AMP-ACTIVATED PROTEIN KINASE

(57) Abstract: A method of neuroprotection which comprises administration of an AMPK inhibitor to a patient who is experiencing or has experienced a stroke, the compound being an AMPK inhibitor. Treatments with these agents significantly reduce the size of infarcts, and therefore minimize the loss of brain tissue and neurons. Thus, function can be preserved after stroke or ischemic injury in the brain. Similarly, neuronal loss can be minimized in degenerative diseases that cause neuronal compromise by perturbing energy utilization and availability in neurons.

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